ACC-i2 with TCT

THE IMPACT OF LOW LEVEL OF HIGH-DENSITY LIPOPROTEIN CHOLESTEROL ON 6-MONTH ANGIOGRAPHIC AND 2-YEAR CLINICAL OUTCOMES IN ACUTE MYOCARDIAL INFARCTION PATIENTS UNDERGOING PRIMARY PERCUTANEOUS CORONARY INTERVENTION

i2 Poster Contributions
McCormick Place South, Hall A
Saturday, March 24, 2012, 9:30 a.m.-Noon

Session Title: Acute Myocardial Infarction
Abstract Category: 6. PCI - Acute MI
Presentation Number: 2520-115

Authors: *Ji Young Park, Seung-Woon Rha, Amro Elnagar, Byoung Geol Choi, sung il Im, Sunwon Kim, Jin Oh Na, Seongwoo Han, Cheol Ung Choi, Hong Euy Lim, Jin Won Kim, Eung Ju Kim, Hong-Seog Seo, Chang Gyu Park, Dong Joo Oh, Cardiology Department, Eulji General Hospital, Seoul, South Korea, Cardiovascular Center, Korea University Guro Hospital, Seoul, South Korea*

Background: Low plasma level of high-density lipoprotein cholesterol (HDL) is known to be arisk factor of coronary artery disease. However, there have been limited data whether the impact of low HDL on the angiographic and clinical outcomes of the acute myocardial infarction (AMI) patients (pts) undergoing percutaneous coronary intervention (PCI).

Methods: A total of 799 AMI pts underwent PCI with DESs were enrolled. The pts were divided into two groups: Low HDL group (HDL-C<40mg/dl in male and HDL-C <50mg/dl in female, n= 408) and control group (n=391). Mid-term angiographic outcomes and major clinical outcomes up to 2 years were compared between the two groups.

Results: Baseline characteristics were similar between the two groups except Low HDL group had more elderly, female, diabetes, triglyceride, and less cholesterol than control group. At 6-months, angiographic outcomes were similar between the two groups. However, Low HDL group had higher incidence of in-hospital total death and cardiac death than those of control group. Further, Low HDL group showed higher incidence of total death, cardiac death and TLR-MACEs up to 2 years than those of control group (Table). Multivariate analysis showed that Low HDL was an independent predictor of cardiac death up to 2 years (Adjusted OR 2.107, CI 1.01-4.39, p=0.047).

Conclusions: Low HDL level was associated with higher incidence of short term and long term adverse clinical events. Particularly, Low HDL level was an independent predictor of cardiac death at 2 years.

Table. Six-month angiographic and 2-year clinical outcomes

	Low HDL-C (n=408pts)	Normal HDL-C (n=391pts)	p-value
Six-month angiographic FU			
DS%	24.59 ± 21.09	23.35 ± 20.78	0.202
FU MLD (mm)	2.28 ± 0.75	2.34 ± 0.88	0.101
Late Loss (mm)	0.76 + 1.50	0.70 + 0.73	0.498
Clinical outcomes up to 2 year			
Follow up rate	287/408=70.3%	319/391=81.6%	
Total Death	41 (14.3)	22 (6.9)	0.003
Cardiac Death	32 (11.1)	16 (5.0)	0.006
Q-MI	6 (2.1)	9 (2.8)	0.610
Revascularization	40 (13.9)	44 (13.8)	1.000
TLR	30 (10.5)	29 (9.1)	0.586
TVR	38 (13.2)	37 (11.6)	0.621
TLR MACE	60 (20.9)	44 (13.8)	0.023
All MACE	78 (27.2)	65 (20.4)	0.055